

ABSTRACT

A novel visual method and system for interacting with displays and all devices that use such displays. The system has three hardware elements, which are a display, a light sensor or camera that can register the display image and the pointing device or its effect on the display, and a pointing device that can be registered by or produces recognizable characteristics that can be registered by the light sensor or camera.. The system uses a set of methods as follows: a method for detecting the display, and the pointing device on or in relation to the display, a method for establishing the correspondence between the position of the pointing device in relation to the display as it is registered by the light sensor or camera and its position in relation to the computer or display device space, a method for correcting the offsets between the position of the pointing device or effect thereof on the display as observed by the user or by the light sensor or camera, and the position of the pointer on the computer or device display space, a method for selecting or highlighting a specific item or icon on the display, a method for activating a specific process, program, or menu item represented on the display, and a method for writing, scribing, drawing, highlighting, annotating, or otherwise producing marks on the display.